3A	LOTT		Other WWTPs	Other (includes rivers)	External
DIN	Jan	Use 1997 data (no permit limit)	Capped at current discharges for each month (this is a 60% increase from 1997 model inputs)	35% decrease	35% decrease
	Feb	Use 1997 data (no permit limit)			
	Mar	Use 1997 data (no permit limit)			
	Apr	2.90 mg/L (current permit) (with 1997 flow = 338 lb/day)			
	May	3.0 mg/L (current permit) (with 1997 flow = 338 lb/day)			
	June	2.95 mg/L (current permit) (with 1997 flow = 288 lb/day)			
	July	3.0 mg/L (current permit) (with 1997 flow = 288 lb/day)			
	Aug	2.44 mg/L (reduced load) (with 1997 flow = 220 lb/day)			
	Sept	2.35 mg/L (reduced load) (with 1997 flow = 220 lb/day)			
	Oct	N/A			
	Nov	N/A			
	Dec	N/A			
BOD_5	Jan	30.00 mg/L (current permit) (with 1997 flow = 5640 lb/day)	Capped at current effluent limit for each month: Boston Harbor = 14 lb/day Tamoshan = 11 lb/day Seashore Villa = 3.8 lb/day	35% decrease	35% decrease
	Feb	30.00 mg/L (current permit) (with 1997 flow = 5640 lb/day)			
	Mar	30.00 mg/L (current permit) (with 1997 flow = 5640 lb/day)			
	Apr	7.71 mg/L (current permit) (with 1997 flow = 900 lb/day)			
	May	7.91 mg/L (current permit) (with 1997 flow = 900 lb/day)			
	June	6.87 mg/L (current permit) (with 1997 flow = 671 lb/day)			
	July	6.45 mg/L (current permit) (with 1997 flow = 671 lb/day)			
	Aug	5.10 mg/L (reduced permit) (with 1997 flow = 460 lb/day)			
	Sept	4.92 mg/L (reduced permit) (with 1997 flow = 460 lb/day)			
	Oct	N/A			
	Nov	N/A			
	Dec	N/A			

Phase 3B – Same as 3A but applies a 45% reduction to external sources.

Note: No changes are made to organic nitrogen or carbon.

Description of allocations and model inputs

LOTT

- For these scenarios LOTT receives a reduction in August and September for both DIN and BOD. All other months are kept at current effluent limits. November, December, January, February, and March do not have effluent limits.
    - For August and September we changed the DIN limit from 288 to 220 lb/day. We chose 220 because this is above the most recent five year average and allows for some additional growth (roughly a 35 percent increase)but also reduced the current effluent limit. These scenarios change the BOD limit from 671 to 460. We chose 671 because this is above the most recent five year average and allows for additional growth (roughly double current discharges). This is larger than growth allowed for DIN because DIN has a larger impact on DO.
- Model inputs are derived so that the resulting load is equal to the effluent limit load. We used the 1997 flows to calculate the concentration for the model input. If the resulting concentration is higher than the concentration effluent limit, we used the concentration effluent limit instead.

Other WWTP

- For both scenarios the three small WWTPs are capped at current discharges for DIN for the months of July, August, September, and October. They are capped at current effluent limits for BOD for the entire year.
    - For DIN the critical period is covered and a margin of safety for July and October is provided since no other effluent limits exist for these WWTPs.
- Since only Boston Harbor has nitrogen data, we used it to consider current discharges. We looked at the maximum discharges over the last five years and found that in the summer there has been up to roughly a 60% increase since 1997. In the model DIN should be increased by 60% (for all months) in order to reach recent loading values. Flow data should be held constant and concentration changed to reach the appropriate load. BOD concentrations should be changed (for all months) so the resulting load is equal to the permit effluent limit.

Other

- The *other* category includes all watershed sources, including nonpoint, small permittees, and stormwater. In these scenarios we assign a percentage reduction for each month (35%) for both DIN and BOD.
    - Percent reductions were chosen based on iterative modeling to narrow down the range of reductions necessary to meet water quality standards.
- Model inputs should be derived so that anthropogenic loads are reduced by 35%. The anthropogenic load is determined by subtracting the natural condition load from the existing load. Flow should be held constant and changes should be made to nutrient concentrations.

External sources

- This includes all nutrients arriving in Budd Inlet through the northern boundary with Puget Sound.
    - Specific allocations will be made as part of the Puget Sound Nutrient Source Reduction Strategy. Actual allocations may be given to all or some of the sources but the final allocations must result in at least a 35% (Phase 3A) or 45% (Phase 3B) decrease in dissolved oxygen deficit.

- Model inputs should be derived so that anthropogenic loads of DIN and BOD are reduced by 35/45%. The anthropogenic load is determined by subtracting the natural condition load from the existing load. Flow should be held constant and changes should be made to nutrient concentrations. This should be done for each of the individual sources (rivers and WWTPs in the aggregated external source).